



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,537	08/25/2005	Haruo Kawakami	263391US0PCT	9700
22850 7590 02/06/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER BARNES, SETH W				
ART UNIT 2822		PAPER NUMBER		
NOTIFICATION DATE 02/06/2009		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary

Application No.

10/518,537

Applicant(s)

KAWAKAMI ET AL.

Examiner

SETH BARNES

Art Unit

2822

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 2-9 and 11-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 03/11/2005
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of the species, formula (I), in the reply filed on 14 January 2009 is acknowledged. The traversal is on the following grounds:

The Examiner alleges that the species recited in the specification are patentably distinct. However, the burden of proof is on the Office to provide reasons and/or examples to support any conclusions with regard to patentable distinction (M.P.E.P. §803). The Examiner has not given adequate reasons and/or examples to support patentable distinctness; rather the Office merely states conclusions.

Accordingly, the Office has failed to meet the burden necessary to sustain the election requirement, and the Office has not shown that a burden exists in searching all of the species.

Further, M.P.E.P. §803 states as follows:

If the search and examination of an entire application can be made without a serious burden, the Examiner must examine it on its merits even though it includes claims to distinct and independent inventions.

Applicants submit that a search of the entire application would not constitute a serious burden on the Office.

Applicants make no statement regarding the patentable distinctness of the species but note that for the restriction to be proper there must be patentable differences between the species as claimed. M.P.E.P. §808.01(a).

The Examiner respectfully disagrees with the Applicant for the following reasons:

Applicant's arguments are based on restriction requirements under Title 35 of the United States Code and Title 37 of the Code of Federal Regulations. This is not proper. Restrictions in applications entered in the National Stage under 35 U.S.C. 371 fall under unity of invention found in chapter 1800 of the M.P.E.P.

As previously stated the species do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: The only same

feature the claims have is the dependence of claim 1 and the compound of claim 1. This same feature can be found in at least WO 02/37500 A1 and Ma et al., 'Data storage with 0.7nm recording marks on a crystalline organic thin film by a scanning tunneling microscope', APPLIED PHYSICS LETTERS, Vol.73, No.6, 10 August, 1998 (10.08.98), pages 850 to 852.

Therefore the features of claim 1 do not serve as a common inventive concept for the subject matter of the dependent claims 2-19 each of which defines a specific bistable compound and chemical formula.

The requirement is still deemed proper and is therefore made **FINAL**.

Claims 2-9 and 11-19 are **withdrawn** from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim.

Drawings

Figures 41 and 42 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The abstract of the disclosure is objected to because of improper language and/or content. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Yang et al.
WO 02/37500 A1 (Yang).

Yang discloses in [0030]-[0044] a switching element which comprises:

an organic bistable material (**12**), the organic bistable material having two stable states in resistance under applied voltage;

at least two electrodes (**14.16**), the electrodes being placed such that the organic bistable material is arranged between two of the electrodes,

the switching element being characterized in that the organic bistable material consists essentially of a compound having an electron-donating functional group and an electron-accepting functional group in a molecule of said compound.

Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Ma et al. *Data storage with 0.7 nm recording marks on a crystalline organic thin film by a scanning tunneling microscope*, Applied Physics Letters, vol. 73, no.6, pages 850-852 1998 (Ma).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yang in view of Albert et al., *Rational Design of Molecules with Large Hyperpolarizabilities. Electric Field, Solvent Polarity, and Bond Length Alternation Effects on Merocyanine Dye Linear and Nonlinear Optical Properties*, J. Phys. Chem. 1996, 100, 9714-9725. (Albert)

Yang discloses the switching element as rejected supra but does not disclose wherein the compound is a quinoneimine compound of formula (I).

Albert discloses a quinoneimine compound of formula (I) in **Fig. 3 III**.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to see the chemical compound of Albert in the switching element of Yang for the purpose of providing a suitable alternative material with predictable results based upon the teachings of Albert. Furthermore it has been held to be within the general skill of a worker in the art to select a known material on the base of its suitability, for its intended use involves only ordinary skill in the art. See MPEP § 2144.07.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SETH BARNES whose telephone number is (571)272-6008. The examiner can normally be reached on Monday thru Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zandra Smith can be reached on (571) 272-2429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. B./
Examiner, Art Unit 2822
30 January 2009

/N. Drew Richards/
Supervisory Patent Examiner, Art Unit 2895